Physica C 179 (1991) 469–472
North-Holland

PHYSICA C

Author Index to Volume 179

Alekseevskii, N.E., see I.A. Garifullin **179**, 9
Allen, C.J., see M.R. De Guire **179**, 333
Anokhin, A.O., V.Yu. Irkhin and M.I. Katsnelson, On the effect of strong electron correlations on various superconductivity mechanisms **179**, 167
Aomine, T., see B. Zhao **179**, 138
Aponte, J.M., see M. Mejías **179**, 437
Asano, H., see T. Wada **179**, 455
Asayama, K., see K. Ishida **179**, 29
Asayama, K., see Y. Kitaoka **179**, 107

Babu, T.G.N., see R. Dupree **179**, 311
Bansal, N.P., see M.R. De Guire **179**, 333
Baranov, M.A., V.S. Gorbachev and A.V. Senatorov, Properties of the Josephson medium at finite temperature **179**, 52
Bartram, M.E., see N.D. Shinn **179**, 303
Bertrand, D., see X. Bozec **179**, 22
Billinge, S.J.L., T. Egami, D.R. Richards, D.C. Hinks, B. Dabrowski, J.D. Jorgensen and K.J. Volin, Local structural change close to T_c in $Nd_{2-x}Ce_xCuO_{4-y}$ **179**, 279
Boekholt, M., J.V. Harzer, B. Hillebrands and G. Güntherodt, Determination of the sound velocities and the complete set of elastic constants for $Bi_2Sr_2CaCu_2O_{8+\delta}$ single crystals using Brillouin light scattering **179**, 101
Bolmont, D., see B. Loegel **179**, 15
Bonetti, E., E.G. Campari, T. Manfredini and S. Mantovani, Orthorhombic to tetragonal phase transition in $YBa_2Cu_3O_{7-x}$ observed by dynamic Young's modulus measurements **179**, 381
Bozec, X., R. Maury, A.R. Fert, J.P. Redoulès, D. Bertrand, M. Potel, J.C. Levet, P. Gougeon and H. Noël, Temperature, frequency and field dependence of AC hysteresis losses in superconducting YBaCuO single crystal **179**, 22
Bozukov, L.N., see D.M. Mateev **179**, 295
Bredikhin, S.I., G.A. Emel'chenko, V.Sh. Shechtman, A.A. Zhokhov, S. Carter, R.J. Chater, J.A. Kilner and B.C.H. Steele, Anisotropy of oxygen self-diffusion in $YBa_2Cu_3O_{7-\delta}$ single crystals **179**, 286

Campari, E.G., see E. Bonetti **179**, 381
Carter, S., see S.I. Bredikhin **179**, 286
Cava, R.J., see H.W. Zandbergen **179**, 213
Chang, Y.C., see W. Kritscha **179**, 59
Chater, R.J., see S.I. Bredikhin **179**, 286
Chen, L., see X. Qiu **179**, 176
Chen, P., see X. Qiu **179**, 176
Chen, T.G., see C.J. Zhou **179**, 369
Cheong, S.-W., see N.D. Shinn **179**, 303
Chu, C.W., see R.L. Meng **179**, 149
Crabtree, G.W., see W. Kritscha **179**, 59
Cucolo, A.M., R.C. Dynes, J.M. Valles Jr. and L.F. Schneemeyer, Planar tunnel junctions on 90 K and 60 K YBCO single crystals. Superconducting and normal state properties **179**, 69
Cui, C., see X. Qiu **179**, 176

Dabrowski, B., see S.J.L. Billinge **179**, 279
Davydov, A.S. and S.P. Kruchinin, Interlayer effects in the newest high-T_c superconductors **179**, 461
De Guire, M.R., N.P. Bansal, D.E. Farrell, V. Finan, C.J. Kim, B.J. Hills and C.J. Allen, The series $Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$ ($1 \leqslant n \leqslant 5$). Phase stability and superconducting properties **179**, 333
Deslandes, F., A.I. Nazzal and J.B. Torrance, Search for superconductivity in analogues of $La_{2-x}Sr_xCuO_4$: $Sr_{2-x}Ln_xVO_4$ (Ln = La, Ce, Pr, Nd, Eu) **179**, 207
Diko, P., see M. Nevřiva **179**, 253
Dou, S.X., see Y. Zhao **179**, 85
Dou, S.X., see N. Savvides **179**, 361
Dupree, R., Z.P. Han, D.McK. Paul, T.G.N. Babu and C. Greaves, NMR evidence for common magnetic behaviour in $YBa_2Cu_4O_8$ and $YBa_2Cu_3O_{7-\delta}$ **179**, 311
Durčok, S., see M. Nevřiva **179**, 253
Dynes, R.C., see A.M. Cucolo **179**, 69

Edwards, P.P., see R.S. Liu **179**, 353
Egami, T., see S.J.L. Billinge **179**, 279
Emel'chenko, G.A., see S.I. Bredikhin **179**, 286
Endoh, Y., see M. Matsuda **179**, 347

Farrell, D.E., see M.R. De Guire **179**, 333
Fert, A.R., see X. Bozec **179**, 22
Finan, V., see M.R. De Guire **179**, 333
Fisk, Z., see N.D. Shinn **179**, 303
Flank, A.M., see H. Tolentino **179**, 387
Fontaine, A., see H. Tolentino **179**, 387
Fueki, K., see Y. Idemoto **179**, 96
Fujita, T., see M. Kurisu **179**, 358
Fujiwara, K., see Y. Kitaoka **179**, 107
Fujiwara, S., see Y. Idemoto **179**, 96

Garifullin, I.A., N.N. Garif'yanov, N.E. Alekseevskii and S.F. Kim, EPR data on the evolution of the oxygen distribution in single crystals of $YBa_2Cu_3O_{7-\delta}$ **179**, 9
Garif'yanov, N.N., see I.A. Garifullin **179**, 9
Gorbachev, V.S., see M.A. Baranov **179**, 52
Gornostyrev, Yu.N., M.I. Katsnelson and A.V. Trefilov, Defects at structure domain boundaries in $YBa_2Cu_3O_7$ and their dynamics **179**, 119

Gougeon, P., see X. Bozec **179**, 22
Grantscharova, E., see R. Vijayaraghavan **179**, 183
Greaves, C., see R. Dupree **179**, 311
Guilloux-Viry, M., see M.G. Karkut **179**, 262
Güntherodt, G., see M. Boekholt **179**, 101
Guru Row, T.N., see R. Vijayaraghavan **179**, 183

Hadjiev, V.G., see D.M. Mateev **179**, 295
Han, Z.P., see R. Dupree **179**, 311
Harzer, J.V., see M. Boekholt **179**, 101
Hase, T., see H. Takahashi **179**, 291
Hejtmánek, J., see M. Nevřiva **179**, 253
Hervieu, M., see C. Martin **179**, 1
Hervieu, M., see M. Huve **179**, 229
Hidaka, Y., see M. Matsuda **179**, 347
Hillebrands, B., see M. Boekholt **179**, 101
Hills, B.J., see M.R. De Guire **179**, 333
Hinks, D.C., see S.J.L. Billinge **179**, 279
Hirsch, J.E., Bose decondensation versus pair unbinding in short-coherence-length superconductors **179**, 317
Hor, P.H., see R.L. Meng **179**, 149
Horie, Y., see B. Zhao **179**, 138
Huve, M., see C. Martin **179**, 1
Huve, M., C. Michel, C. Martin, M. Hervieu, A. Maignan, J. Provost and B. Raveau, The "1201"-phase of the "Tl–Sr–La–Cu–O" system. Homogeneity range, structure and superconductivity **179**, 229

Ichinose, A., see T. Wada **179**, 455
Idemoto, Y., S. Fujiwara and K. Fueki, High temperature conductivity of 2223 phase of Bi–Pb–Sr–Ca–Cu–O superconducting oxides **179**, 96
Igarashi, H., see E. Iguchi **179**, 393
Iguchi, E., H. Nishikawa, A. Tamenori, T. Manako and H. Igarashi, Correlation between ionic potential and superconductivity in $Tl_2Ba_2CuO_{6+x}$ series **179**, 393
Iliev, M.N., see D.M. Mateev **179**, 295
Irkhin, V.Yu., see A.O. Anokhin **179**, 167
Ishida, K., Y. Kitaoka, T. Yoshitomi, N. Ogata, T. Kamino and K. Asayama, Gapless superconductivity in Zn-doped $YBa_2Cu_3O_7$ studied by Cu NMR and NQR. Possibility of d-wave superconductivity in high-T_c oxides **179**, 29
Ishida, K., see Y. Kitaoka **179**, 107
Ishii, T., T. Watanabe, K. Kinoshita and A. Matsuda, Single crystal growth and superconductivity in $La_{1.87}Ca_{1.13}Cu_2O_6$ **179**, 39
Izumi, F., see T. Wada **179**, 455
Izumi, H., see H. Takahashi **179**, 291

Jiang, P.Z., see W. Kritscha **179**, 59
Jorgensen, J.D., see S.J.L. Billinge **179**, 279

Kabius, B., see H. Watanabe **179**, 75
Kamino, T., see K. Ishida **179**, 29
Karkut, M.G., M. Guilloux-Viry, A. Perrin, J. Padiou and M. Sergent, Surface and in-plane characterization of $YBa_2Cu_3O_7$ thin films grown by laser ablation **179**, 262
Karmanenko, S.F., see O.G. Vendik **179**, 91
Katsaros, A., see N. Savvides **179**, 361
Katsnelson, M.I., see Yu.N. Gornostyrev **179**, 119
Katsnelson, M.I., see A.O. Anokhin **179**, 167
Kilner, J.A., see S.I. Bredikhin **179**, 286
Kim, C.J., see M.R. De Guire **179**, 333
Kim, J.H., see J.P. Lu **179**, 191
Kim, S.F., see I.A. Garifullin **179**, 9
Kinoshita, K., see T. Ishii **179**, 39
Kitaoka, Y., see K. Ishida **179**, 29
Kitaoka, Y., K. Fujiwara, K. Ishida, K. Asayama, Y. Shimakawa, T. Manako and Y. Kubo, Spin dynamics in heavily-doped high-T_c superconductors $Tl_2Ba_2CuO_{6+y}$ with a single CuO_2 layer studied by ^{63}Cu and ^{205}Tl NMR **179**, 107
Klaumünzer, S., see H. Watanabe **179**, 75
Kobatake, K., see T. Ohtani **179**, 376
Koblischka, M.R., see Th. Schuster **179**, 269
Kolesov, S.G., see O.G. Vendik **179**, 91
Konson, A.F., see O.G. Vendik **179**, 91
Kosuge, M., see J. Sugiyama **179**, 131
Krajewski, J.J., see H.W. Zandbergen **179**, 213
Kritscha, W., F.M. Sauerzopf, H.W. Weber, G.W. Crabtree, Y.C. Chang and P.Z. Jiang, Magnetization of $Bi_2Sr_2CaCu_2O_8$ single crystals. Field-induced diamagnetism above T_c, anisotropic irreversibility lines, and reversible mixed state properties **179**, 59
Kronmüller, H., see Th. Schuster **179**, 269
Kruchinin, S.P., see A.S. Davydov **179**, 461
Kubo, Y., see Y. Kitaoka **179**, 107
Kulik, J., see H.W. Zandbergen **179**, 43
Kulkarni, G.U., see R. Vijayaraghavan **179**, 183
Kurisu, M., S. Matsuda, T. Suzuki and T. Fujita, Two-step superconducting transition and anomalous pressure dependence of T_c in La_2CuO_4 **179**, 358
Kuroda, Y., see K. Miura **179**, 411
Kuroumaru, S., see B. Zhao **179**, 138

Lagarde, P., see H. Tolentino **179**, 387
Levet, J.C., see X. Bozec **179**, 22
Levin, K., see J.P. Lu **179**, 191
Li, J., see X. Qiu **179**, 176
Li, L., see B. Zhao **179**, 138
Li, L., see X. Qiu **179**, 176
Li, N., see X. Qiu **179**, 176
Li, S., see X. Qiu **179**, 176
Li, T.W., see C.J. Zhou **179**, 369
Likholetov, Yu.V., see O.G. Vendik **179**, 91
Liou, S.H., see D.J. Werder **179**, 430
Liu, G., see X. Qiu **179**, 176
Liu, H.K., see Y. Zhao **179**, 85
Liu, M., see X. Qiu **179**, 176
Liu, R.S. and P.P. Edwards, Synthesis of monophasic $Tl_2Ba_2Ca_2Cu_3O_{10}$ (T_c = 120 K) superconductor **179**, 353
Locquet, J.-P., see T. Schneider **179**, 125
Loegel, B., D. Bolmont and A. Mehdaoui, The influence of thermal treatments, fabrication methods and shapes on the

magnetic transition of high temperature superconducting compounds **179**, 15
Lovtsov, S.V. and V.Yu. Yushankhai, Effective singlet-triplet model for CuO_2 plane in oxide superconductors: the charge fluctuation regime **179**, 159
Lu, J.P., Q. Si, J.H. Kim and K. Levin, Microscopic Fermi liquid theory of NMR relaxation and neutron scattering in the metallic copper oxides **179**, 191

Ma, B.H., see K. Zhang **179**, 405
Maignan, A., see C. Martin **179**, 1
Maignan, A., see M. Huve **179**, 229
Manako, T., see Y. Kitaoka **179**, 107
Manako, T., see E. Iguchi **179**, 393
Manfredini, T., see E. Bonetti **179**, 381
Mantovani, S., see E. Bonetti **179**, 381
Martin, C., A. Maignan, M. Huve, M. Hervieu, C. Michel and B. Raveau, $TlBa_{2-x}La_{2+x}Cu_2O_{9\pm\delta}$: a new 42 K superconductor, intergrowth of "1201" and "0201" structures **179**, 1
Martin, C., see M. Huve **179**, 229
Mase, S., see B. Zhao **179**, 138
Mateev, D.M., M.N. Iliev, L.N. Bozukov, V.G. Hadjiev and P. Stastny, Raman spectrum of the double-layer superconductor $La_{2-x}Sr_xCaCu_2O_{6-\delta}\pi(0.2\leqslant x\leqslant 0.4)$ **179**, 295
Matsuda, A., see T. Ishii **179**, 39
Matsuda, M., Y. Endoh and Y. Hidaka, Crystal growth and characterization of $Pr_{2-x}Ce_xCuO_4$ **179**, 347
Matsuda, S., see M. Kurisu **179**, 358
Matsuura, T., see K. Miura **179**, 411
Maury, R., see X. Bozec **179**, 22
Mehdaoui, A., see B. Loegel **179**, 15
Mejías, M., J.M. Aponte and M. Octavio, Fabrication of high quality Bi–Sr–Ca–Cu–O thin films by multiple source evaporation **179**, 437
Meng, R.L., Y.Y. Sun, P.H. Hor and C.W. Chu, Grain growth in monolithic $YBa_2Cu_3O_7$ with high J_c **179**, 149
Michel, C., see C. Martin **179**, 1
Michel, C., see M. Huve **179**, 229
Mitsugi, K., see Y. Yamaguchi **179**, 447
Miura, K., T. Matsuura and Y. Kuroda, Quasi-particle interaction in strongly correlated systems. Degenerate Anderson lattice **179**, 411
Morishita, T., see H. Takahashi **179**, 291
Moser, N., see Th. Schuster **179**, 269

Nara, A., see T. Wada **179**, 455
Nazzal, A.I., see F. Deslandes **179**, 207
Nevřiva, M., E. Pollert, J. Hejtmánek, S. Durčok, M. Šimečková and P. Diko, Growth and characterization of $Y_{1-y}Pr_yBa_2Cu_3O_{7-x}$ single crystals **179**, 253
Nieuwendijk, B., see H.W. Zandbergen **179**, 43
Nishikawa, H., see E. Iguchi **179**, 393
Noël, H., see X. Bozec **179**, 22

Octavio, M., see M. Mejías **179**, 437
Ogata, N., see K. Ishida **179**, 29
Ohata, K., see H. Takahashi **179**, 291
Ohkubo, H., see B. Zhao **179**, 138
Ohtani, T., K. Kobatake and T. Takehara, Thermoelectric power of the high-T_c oxide superconductors at elevated temperatures **179**, 376
Ojima, Y., see J. Sugiyama **179**, 131
Overmyer, D.L., see N.D. Shinn **179**, 303

Padiou, J., see M.G. Karkut **179**, 262
Paul, D.McK., see R. Dupree **179**, 311
Peck Jr., W.F., see H.W. Zandbergen **179**, 213
Perrin, A., see M.G. Karkut **179**, 262
Pollert, E., see M. Nevřiva **179**, 253
Potel, M., see X. Bozec **179**, 22
Provost, J., see M. Huve **179**, 229

Qiu, X., see B. Zhao **179**, 138
Qiu, X., C. Cui, S. Li, M. Liu, J. Li, Y. Zhang, Y. Zhao, P. Xu, L. Li, L. Chen, P. Chen, N. Li and G. Liu, Resistive transition and pinning potential in $YBa_2Cu_3O_7$ thin film **179**, 176

Rangavittal, N., see R. Vijayaraghavan **179**, 183
Rao, C.N.R., see R. Vijayaraghavan **179**, 183
Raveau, B., see C. Martin **179**, 1
Raveau, B., see M. Huve **179**, 229
Redoulès, J.P., see X. Bozec **179**, 22
Richards, D.R., see S.J.L. Billinge **179**, 279
Roas, B., see H. Watanabe **179**, 75
Rogers Jr., J.W., see N.D. Shinn **179**, 303

Saemann-Ischenko, G., see H. Watanabe **179**, 75
Sauerzopf, F.M., see W. Kritscha **179**, 59
Savvides, N., A. Katsaros and S.X. Dou, Critical current density and flux pinning in silver/superconductor composites and tapes **179**, 361
Schirber, J.E., see N.D. Shinn **179**, 303
Schneemeyer, L.F., see A.M. Cucolo **179**, 69
Schneider, T. and J.-P. Locquet, Dimensional crossover and finite size effects in superconducting films **179**, 125
Schuster, Th., M.R. Koblischka, N. Moser and H. Kronmüller, Observation of nucleation and annihilation of flux-lines with opposite sign in high-T_c superconductors **179**, 269
Segre, C.U., see K. Zhang **179**, 405
Seidler, G., see K. Zhang **179**, 405
Senatorov, A.V., see M.A. Baranov **179**, 52
Sergent, M., see M.G. Karkut **179**, 262
Shechtman, V.Sh., see S.I. Bredikhin **179**, 286
Shimakawa, Y., see Y. Kitaoka **179**, 107
Shinn, N.D., M.E. Bartram, J.E. Schirber, J.W. Rogers Jr., D.L. Overmyer, Z. Fisk and S.-W. Cheong, Interstitial doping and oxygen exchange in superconducting $La_2CuO_{4+\delta}$ **179**, 303
Si, Q., see J.P. Lu **179**, 191
Šimečková, M., see M. Nevřiva **179**, 253
Soderholm, L., C.W. Williams and U. Welp, The

superconductor-related oxides Cm_2CuO_4 and $Cm_{1.83}Th_{0.17}CuO_4$ **179**, 440
Stastny, P., see D.M. Mateev **179**, 295
Steele, B.C.H., see S.I. Bredikhin **179**, 286
Studer, F., see H. Tolentino **179**, 387
Sugiyama, J., M. Kosuge, Y. Ojima, H. Yamauchi and S. Tanaka, TEM observation and Hall measurements on superconductive $Nd_2CuO_{4-x}F_x$ **179**, 131
Sun, Y.Y., see R.L. Meng **179**, 149
Suzuki, T., see M. Kurisu **179**, 358

Takahashi, H., T. Hase, H. Izumi, K. Ohata, T. Morishita and S. Tanaka, Effect of an oxygen pressure on crystal growth of *a*-axis oriented $YBa_2Cu_3O_{7-x}$ films prepared by pulsed laser deposition **179**, 291
Takehara, T., see T. Ohtani **179**, 376
Tamenori, A., see E. Iguchi **179**, 393
Tanaka, S., see J. Sugiyama **179**, 131
Tanaka, S., see H. Takahashi **179**, 291
Tanaka, S., see T. Wada **179**, 455
Tokumoto, M., see Y. Yamaguchi **179**, 447
Tolentino, H., A. Fontaine, A.M. Flank, P. Lagarde and F. Studer, Reverse model of metallization for La_2CuO_4/Nd_2CuO_4 by impurity hole/electron levels in the band gap **179**, 387
Torrance, J.B., see F. Deslandes **179**, 207
Trefilov, A.V., see Yu.N. Gornostyrev **179**, 119

Urban, K., see H. Watanabe **179**, 75

Valles Jr., J.M., see A.M. Cucolo **179**, 69
Vendik, O.G., Yu.V. Likholetov, S.F. Karmanenko, S.G. Kolesov and A.F. Konson, A two-layer simulation of the $YBa_2Cu_3O_{7-x}$ film microwave surface resistance **179**, 91
Vijayaraghavan, R., N. Rangavittal, G.U. Kulkarni, E. Grantscharova, T.N. Guru Row and C.N.R. Rao, Structure and superconducting properties of $Tl_{1-y}Pb_yY_{1-x}Ca_xSr_2Cu_2O_7$. Dependence of T_c on hole concentration **179**, 183
Volin, K.J., see S.J.L. Billinge **179**, 279

Wada, T., A. Ichinose, F. Izumi, A. Nara, H. Yamauchi, H. Asano and S. Tanaka, Neutron powder diffraction study of the Pb-based copper oxide containing thick fluorite blocks: $(Pb,Cu)Sr_2(Ho,Ce)_3Cu_2O_{11+z}$ **179**, 455
Watanabe, H., B. Kabius, K. Urban, B. Roas, S. Klaumünzer and G. Saemann-Ischenko, The influence of 173 MeV Xe-ion irradiation on the microstructure of $YBa_2Cu_3O_7$ thin films **179**, 75
Watanabe, T., see T. Ishii **179**, 39
Weber, H.W., see W. Kritscha **179**, 59
Welp, U., see L. Soderholm **179**, 440
Werder, D.J. and S.H. Liou, Epitaxial $Tl_2Ba_2Ca_2Cu_3O_{10}$ on $(0,0,1)LaAlO_3$ substrates **179**, 430
Williams, C.W., see L. Soderholm **179**, 440

Xu, P., see B. Zhao **179**, 138
Xu, P., see X. Qiu **179**, 176

Yamaguchi, Y., M. Tokumoto and K. Mitsugi, Low-frequency AC losses near lower critical field of high-T_c superconductors **179**, 447
Yamauchi, H., see J. Sugiyama **179**, 131
Yamauchi, H., see T. Wada **179**, 455
Yanada, E., see B. Zhao **179**, 138
Yoshitomi, T., see K. Ishida **179**, 29
Yushankhai, V.Yu., see S.V. Lovtsov **179**, 159

Zandbergen, H.W., J. Kulik and B. Nieuwendijk, Limitations on the monitoring with electron microscopy of the formation of defects in $YBa_2Cu_3O_7$ by neutron irradiation **179**, 43
Zandbergen, H.W., R.J. Cava, J.J. Krajewski and W.F. Peck Jr., HREM study of structural changes at or near the surface of $ErBa_2Cu_4O_8$ upon heating in air at 100–250°C **179**, 213
Zhang, K., G. Seidler, B.H. Ma and C.U. Segre, Structure and superconductivity in the single Cu–O layered $(Bi_{2-x}Pb_x)(Sr_{2-y}La_y)CuO_{6+\delta}$ system **179**, 405
Zhang, Y., see B. Zhao **179**, 138
Zhang, Y., see X. Qiu **179**, 176
Zhao, B., S. Kuroumaru, Y. Horie, E. Yanada, T. Aomine, X. Qiu, Y. Zhang, Y. Zhao, P. Xu, L. Li, H. Ohkubo and S. Mase, Flux creep in *c*-axis oriented epitaxial $YBa_2Cu_3O_7$ thin film **179**, 138
Zhao, Y., H.K. Liu and S.X. Dou, Effect of co-doping of Ca and Al on hole concentration and superconductivity in the $YBa_2Cu_3O_{7-y}$ system **179**, 85
Zhao, Y., see B. Zhao **179**, 138
Zhao, Y., see X. Qiu **179**, 176
Zhokhov, A.A., see S.I. Bredikhin **179**, 286
Zhou, C.J., T.W. Li and T.G. Chen, Out-diffusion of oxygen in Bi-system superconducting oxide **179**, 369

Physica C 179 (1991) 473
North-Holland

PHYSICA C

Analytic Subject Index to Volume 179

AC susceptibility of superconductors 15, 22, 361, 447
AF spin correlation 107
Anderson lattice 411
Antiferromagnetic order 358, 440
Applications of high-T_c superconductors 361

Bisoliton 461
Bose condensation 317
Brillouin scattering
–on $Bi_2Sr_2CaCu_2O_{8+\delta}$ 101

Carrier concentration 96, 183, 207, 393
Coulomb interactions 393
Critical current density 138, 361, 437
Crystal field 393
Cu–O planes 159, 393

Defect structures 43, 119, 227, 279

Elastic constants
–of $Bi_2Sr_2CaCu_2O_{8+\delta}$ 101
Electrical resistivity 85, 96, 347, 358, 369, 405
Electron doped superconductor 279
Electronic structure 159
–of La_2CuO_4/Nd_2CuO_4 387
Electron microscopy 291
Eliashberg equations 167
Energy gap 69
EXAFS 9

Fermi liquid 167, 191
Fluctuation effects 59, 125
Flux creep 138, 176, 361
Flux domains 269
Flux dynamics 22, 269
Flux pinning 15, 59, 75, 269, 361, 447

Gapless superconductor 29
Ginzburg–Landau theory 52, 125
Grain alignment (texturing) 149
Grain boundaries 149, 430
Granular superconductivity 15, 52

Hall effect 131
Heavy-fermion compounds 411
High energy electron diffraction 262
High pressure effect 358
Hole concentration 159
HREM 1, 43, 75, 214, 227
HTSC 52
Hubbard hamiltonian 159

Interlayer coupling 461
Irradiation effect 43, 75

Lattice parameters 85, 183, 214, 405
Localized moments 9
Lower critical field H_{c1} 447

Magnetic alignment 333
Magnetic susceptibility 311, 440
Magnetization
–of $Bi_2Sr_2CaCu_2O_8$ 59
Microwave absorption 119
Multilayers 125

Neutron diffraction 279, 455
Neutron scattering (inelastic) 191
NMR 29, 107, 191
–in $Yba_2Cu_3O_{7-\delta}$ 311
–in $YBa_2Cu_4O_8$ 311
Normal-state properties 69, 311, 376
NQR 29

O–T transition
–in $YBa_2Cu_3O_{7-x}$ 381
Oxygen diffusion 286, 303, 381
Oxygen stoichiometry 96, 253, 286, 369

Pair distribution (PDF) 279
Pair unbinding 317
Penetration depth 59, 91
Pinning force 15

Rietveld analysis 455

Single-crystal growth 253, 347
–of $La_{1.87}Ca_{1.13}Cu_2O_6$ 39
Specific heat, at T_c 317
Spin–lattice relaxation time T_1 29
–in $Tl_2Ba_2CuO_{6+y}$ 107
Strong electron correlations 167
Structure
–of $Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$ $(1 \le n \le 5)$ 333
–of $(Bi_{2-x}Pb_x)(Sr_{2-y}La_y)CuO_{6+\delta}$ 405
–of $La_{2-x}Sr_xCaCu_4O_{6-\delta}$ 295
–of $Nd_2CuO_{4-x}F_x$ 131
–of $Nd_{2-x}Ce_xCuO_{4-y}$ 279
–of $(Pb,Cu)Sr_2(Ho,Ce)_3Cu_2O_{11+z}$ 455
–of $Tl_{1-y}Pb_yY_{1-x}Ca_xSr_2Cu_2O_7$ 183
–of $Tl_2Ba_2Ca_2Cu_3O_{10}$ (thin films) 430
–of $Tl_2Ba_2CuO_{6+x}$ 393
–of $Tl_{2-x}Ba_2Ca_{2+x}Cu_3O_y$ 353
–of $TlBa_{2-x}La_{2+x}Cu_2O_{9\pm\delta}$ 1
–of Tl–Sr–La–Cu–O 214
–of $YBa_2Cu_3O_7$ (thin films) 262
–of $YBa_2Cu_3O_{7-y}$ 207
Substitution effects
–in $Nd_2CuO_{4-x}F_x$ 131
–in $Pr_{2-x}Ce_xCuO_4$ 347
–in $YBa_2Cu_3O_7$ 29
–in $YBa_2Cu_3O_{7-y}$ 207
Surface impedance 91
Synthesis
–of $Bi_{1.6}Pb_{0.4}Sr_2Ca_2Cu_3O_x$ 369
–of $Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$ $(1 \le n \le 5)$ 333
–of Bi–Sr–Ca–Cu–O (thin films) 437
–of $Cm_{1.83}Th_{0.17}CuO_4$ 440
–of Cm_2CuO_4 440
–of $ErBa_2Cu_4O_8$ 227
–of $La_2CuO_{4+\delta}$ 303
–of $La_{2-x}Sr_xCaCu_4O_{6-\delta}$ 295
–of $Sr_{2-x}Ln_xVO_4$ (Ln = La, Ce, Pr, Nd, Eu) 85
–of $Tl_{2-x}Ba_2Ca_{2+x}Cu_3O_y$ 353
–of $TlBa_{2-x}La_{2+x}Cu_2O_{9\pm\delta}$ 1
–of $Y_{1-x}Pr_xBa_2Cu_3O_{7-x}$ 253
–of $YBa_2Cu_3O_7$ 149
–of $YBa_2Cu_3O_{7-x}$ (thin films) 291

Thermal desorption mass spectroscopy 303
Thermoelectric effects 376
Thin films 75, 91, 138, 176, 262, 430
Tunneling 69

Ultrasound attenuation 119
Ultrasound velocity 101
Upper critical field H_{c2} 39, 125, 176

Weak links 52

XAS 387
XY model 52

Young's modulus 381

Physica C 179 (1991) 475
North-Holland

PHYSICA C

Materials Index to Volume 179

$Bi_{1.6}Pb_{0.4}Sr_2Ca_2Cu_3O_x$
–synthesis 369
$Bi_2Sr_2CaCu_2O_8$
–magnetization 59
$Bi_2Sr_2CaCu_2O_{8+\delta}$
–Brillouin scattering 101
–elastic constants 101
$Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4}$
–structure 333
–synthesis 333
$(Bi_{2-x}Pb_x)(Sr_{2-y}La_y)CuO_{6+\delta}$
–structure 405
Bi–Sr–Ca–Cu–O
–synthesis 437

$Cm_{1.83}Th_{0.17}CuO_4$
–synthesis 440
Cm_2CuO_4
–synthesis 440

$ErBa_2Cu_4O_8$
–synthesis 227

$La_{1.87}Ca_{1.13}Cu_2O_6$
–single-crystal growth 39
$La_2CuO_{4+\delta}$
–synthesis 303

La_2CuO_4/Nd_2CuO_4
–electronic structure 387
$La_{2-x}Sr_xCaCu_4O_{6-\delta}$
–structure 295
–synthesis 295

$Nd_2CuO_{4-x}F_x$
–structure 131
–substitution effects 131
$Nd_{2-x}Ce_xCuO_{4-y}$
–structure 279

$(Pb,Cu)Sr_2(Ho,Ce)_3Cu_2O_{11+z}$
–structure 455
$Pr_{2-x}Ce_xCuO_4$
–substitution effects 347

$Sr_{2-x}Ln_xVO_4$
–synthesis 85

$Tl_{1-y}Pb_yY_{1-x}Ca_xSr_2Cu_2O_7$
–structure 183
$Tl_2Ba_2Ca_2Cu_3O_{10}$
–structure 430
$Tl_2Ba_2CuO_{6+x}$
–structure 393
$Tl_2Ba_2CuO_{6+y}$
–spin–lattice relaxation time T_1 107
$Tl_{2-x}Ba_2Ca_{2+x}Cu_3O_y$
–structure 353
–synthesis 353
$TlBa_{2-x}La_{2+x}Cu_2O_{9\pm\delta}$
–structure 1
–synthesis 1
Tl–Sr–La–Cu–O
–structure 214

$Y_{1-x}Pr_xBa_2Cu_3O_{7-x}$
–synthesis 253
$YBa_2Cu_3O_7$
–structure 262
–substitution effects 29
–synthesis 149
$Yba_2Cu_3O_{7-\delta}$
–NMR 311
$YBa_2Cu_3O_{7-x}$
–O–T transition 381
–synthesis 291
$YBa_2Cu_3O_{7-y}$
–structure 207
–substitution effects 207
$YBa_2Cu_4O_8$
–NMR 311